

STATE OF NORTH CAROLINA  
UTILITIES COMMISSION  
DOCKET NO. E-100, SUB \_\_\_\_\_

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of	)	
Rulemaking Proceeding to Consider	)	PETITION BY NC WARN
Allocation Methods in Rate Hike Proceedings	)	
and Integrated Resource Plans	)	

NOW COMES the North Carolina Waste Awareness and Reduction Network, Inc. (“NC WARN”), through the undersigned attorney, with a petition to open a rulemaking docket to amend the rules governing the information and analysis filed by electric utilities in rate hike proceedings and integrated resource plans (“IRPs”) to include considerations of the cost allocation methods, and in particular, considerations of the cost of meeting new demand. In support of the petition is the following:

1. NC WARN is a not-for-profit corporation under North Carolina law, with approximately one thousand individual members and families across the state. Its purpose is to reduce hazards to public health and the environment from nuclear power and other polluting electricity production through energy efficiency and renewable energy resources. In the past several years, NC WARN has intervened in the several proceedings before the Commission. Its address is NC WARN, Post Office Box 61051, Durham, North Carolina 27715-1051.
  
2. Most recently NC WARN, along with two other advocacy groups, intervened in the Duke Energy rate case, Docket E-7, Sub 989. As the issues became clarified during discovery and the hearing process, it was apparent to NC WARN that two of the

inequalities in the rate case were:

- a. The cost allocation method, Summer Coincident Peak (“SCP”), proposed by Duke Energy to develop its rate structure did not fairly allocate all of the non-fuel related costs proportionately to the customer classes that actually caused them, because the SCP narrowly focuses on peak demand without considering the energy requirements throughout the entire year and the generating units required to meet the energy requirements.
- b. Given the information filed in the rate cases and the IRPs, the Commission does not adequately consider how to fairly meet new demand from a new industry, such sources as the high-load data centers.

3. The rulemaking proposes changes to existing Commission rules in order to examine the methodologies on how the electric utilities allocate costs between various customer classes, and subclasses, to develop rates in rate cases. The purpose of the rulemaking is to place the interconnected issues of cost allocation and meeting new demand before the Commission outside of a rate case, in which this issues are often overlooked or deferred to subsequent proceedings, and outside of the IRP dockets, in which the proposed new information is not required. The goal of the proposed rulemaking is to replace the unfair and outmoded Summer Coincident Peak (“SCP”) cost allocation methodology with one that is fairer to all ratepayers. The proposed rules are attached as Exhibits 1 and 2.

4. The Commission’s rulemaking authority is broad and is only limited by specific statutory language, such as the declarations of policy in G.S. 62-2 or the specific statutes requiring fair and reasonable rates. G.S. 62-31 states “the Commission shall

have and exercise full power and authority to administer and enforce the provisions of this Chapter, and to make and enforce reasonable and necessary rules and regulations to that end.” See *State ex rel. Utilities Commission v. Edmisten*, 204 N.C. 598, 242 S.E.2d 862 (1979). To this end, the Commission has promulgated rules that set forth the information and analysis required for rate cases, Rule 1-17, to implement the G.S. 62-130 - 133 requirements for “just and reasonable rates,” and for IRPs, Rule 8-60 to implement G.S. 62-110.1 requirements for long-term planning. The proposed rulemaking would amend each of those rules.

5. NC WARN acknowledges that this petition and the supporting report, *“On the Backs of Families and Small Businesses: Duke Energy Justifies New Power Plants by Giving Breaks to the World's Richest Corporations,”* rely heavily on the record from the most recent Duke Energy rate case, Docket E-7 Sub 989, as this was the most recent rate case. Exhibit 3. Cost allocation simply was not one of the major issues in the rate design in that rate case, and because of the settlement agreement between Duke Energy and the Public Staff, the Commission declined to rule on the cost allocation methodology.

6. Additional information and analysis are required for the Commission to determine if the rate structures are fair and reasonable. Likewise, the Commission cannot determine the adequacy of the utility plans for meeting the demand for new industry because sufficient information and analysis is lacking in the IRPs. In part, the Commission recognized the need to continue to examine rate structures; the settlement agreement in the Duke Energy rate case, Docket E-7 Sub 989, which was adopted by the Commission as part of the Order Granting General Rate Increase, requires the

parties to

continue to investigate the feasibility of dynamic pricing rate structures, including but not limited to critical peak pricing and time-of-use rate structures for both residential and non-residential customers, with the intent to include such dynamic pricing rate structures as a pilot program in the Company's next general rate case proceeding.

Agreement and Stipulation of Settlement (Order Appendix A), ¶ 5.J.

7. This matter is therefore ripe for a rulemaking proceeding because it would highlight the issues for the next round of rate hikes by the electric utilities and the next IRPs, and provide the Commission with adequate evidence in the record to make findings that the rate hike is "just and reasonable" pursuant to G.S. 62-131 and that the IRPs meet their basic requirements of G.S. 62-110.1. Even though the Duke Energy rate case highlighted the issue, the rulemaking is generic as the proposed rules address future rate cases and planning by all of the electric utilities.

8. Although specific rule changes are being requested, NC WARN would welcome an investigative approach or working committee facilitated by the Public Staff. This was done in developing the rules stemming from Senate Bill 3, Session Law 2007-297, and in amending the IRP rules, both in Docket E-100 Sub 113.

9. As a matter of courtesy, NC WARN has served this petition on the parties to the most recent IRP proceedings, Docket E-100 Sub 128, as it includes each of the electric utilities, and the intervenors in most of the electricity-related dockets, and the two latest rate cases, Docket E-7 Sub 989 and Docket E-22 Sub 479. NC WARN does not object to intervention in the present rulemaking proceeding by any party, either by motion or through a blanket Commission order allowing intervention.

## JUSTIFICATION FOR PROPOSED RULES

10. In its recent rate hikes, Duke Energy nominally used the SCP to allocate costs between customer classes while the Public Staff advocated for the Summer Winter Peaking Average ("SWPA"). The Commission has not directly addressed the question of which methodology is more fair and reasonable because in the last two Duke Energy rate cases, Duke Energy settled with the Public Staff and issue was not litigated.

11. The best description of the advantages of the SWPA over the SCP is in the prefiled direct testimony of Jack Floyd in the 2011 Duke Energy rate case, Docket E-7 Sub 989, which is summarized in NC WARN's brief, January 9, 2012, also filed in that docket. The SCP attempts to "to assign costs between customer classes on the basis of each class's contribution to the summer peak for a particular year." Floyd Direct Testimony, pp. 2-4; Tr. Vol. 6, pp. 375. In the test year for the latest rate case, the coincident peak occurred in the 17th hour of the day, August 11, and under the SCP, all production plant and expenses would then be allocated based on usage during that one hour regardless of demand of electricity at any other time during the rest of the year.

12. The SWPA is similar in several ways to the SCP for allocating production plant and expenses although the principal differences are that "under the SWPA methodology, the fixed costs of production plant are allocated between jurisdictions and among customer classes on the basis of a formula that contains two components. Floyd Direct Testimony, Tr. Vol. 6, pp. 375-377. The first component, the "summer/winter peak" component, is based on the demand of the jurisdiction or customer class in question at the time of the utility's summer and winter peaks. The

second component, the "average" component, is based on the average demand of the jurisdiction or customer class, i.e., total kilowatt-hour (kWh) sales for the year divided by the number of hours in a year. In other words, the first component is based on the demand at particular time, i.e., the peaks, and the second component on the average demand over a year." Floyd Direct Testimony, pp. 2-3. Mr. Floyd further stated "the SWPA methodology recognizes that some production plant costs are incurred because of the need to provide sufficient capacity during peak periods, while other production plant costs are incurred because of the need to provide low-cost energy at all hours of the day."

13. Mr. Floyd stated that the Public Staff has had a long history of supporting the SWPA for the reason that all customers contribute to the cost of providing electric utility service, not just those customers that are on the system at the one particular hour. See also orders in Dockets E-7 Sub 487, E-7 Sub 828, and E-7 Sub 909. In the recent rate case, Mr. Floyd testified, "we look at all hours of the year because whether or not a customer can be off at the single coincident peak hour does not necessarily represent their energy consumption at the other hours of the year so has to be a balance between the energy demands of customers and the peak demand of customers." Tr. Vol. 6 p. 377. The NC WARN report, pages 4 - 6, addresses the inequalities and unfairness inherent to using the SCP methodology. Exhibit 3.

14. Both Dominion and Progress Energy currently use the SWPA allocation method. Moreover, in cases involving Carolina Power & Light (now Progress Energy) and North Carolina Power (now Dominion), the Commission has recognized that a class's energy use year round, not just its contribution to one hour of peak demand,

should be considered in allocating production costs. In 1988, Carolina Power & Light and its industrial customers asked the Commission to switch to a peak-only method, but the Commission refused, stating “without baseload plants, CP&L would simply not be able to serve its high load factor customers. It is only appropriate that high load factor customers pay their share of the cost of the base load plants built primarily to serve them.” Docket E-2 Sub 537, Order Granting Partial Increase in Rates and Charges, p. 130. Similarly, in 1990, the Commission required Dominion to retain the "summer winter peak average" allocation method because "the method also recognizes that not all production plant fixed costs are demand-related, and it recognizes that energy-related production plant fixed cost should be allocated by kWh energy." Docket E-22 Sub 314, Order Approving Partial Rate Increase, p. 17.

15. The SCP cost methodology, for one, encourages new generation by pushing the construction costs of new generating facilities onto residential customers and small businesses and away from large industrial users that often depend on dedicated and increasingly expensive baseload electricity. In the attached report, NC WARN questions the fundamental fairness of the subsidy of residential customers and small businesses for high load customers. Exhibit 3. The residential customers use of electricity is more “peaky”, i.e., follows the utility load duration curve more closely, while the new data centers require constant baseload power throughout the year. Rates established pursuant to the SCP methodology unreasonably discriminate against existing consumers, and in particular the residential and most commercial customers, by providing subsidized rates for new industrial demand, such as the data centers.

16. The cost allocation methodologies further come into play in utility planning;

planning does not occur solely to meet peak demand, but rather to meet all demand during the entire year. At the latest Duke Energy rate hearing, Mr. Floyd responded to one of the Duke Energy witnesses who testified that they used the SCP methodology because their planning and the IRP process look at meeting peak demand, by stating that meeting peak demand is a portion of planning but the utility provides electric service to its customers of both energy and peak demand. In the IRP, the utility plans for peaking, intermediate, and base load generation.

17. Rate allocation should also reflect the different types of generation, especially given the increasingly costly, capital-intensive baseload units. Rates and planning should be aligned as much as possible; the customers who drive the need for a certain type of plant should pay their fair share for that plant. The utilities should say explicitly in their IRPs for which customers, or class of customers, the new plants are needed and then make them pay for them proportionately.

18. Mr. Floyd testified that "when there is a need for new capacity there are generally three types of generation resources to consider: peaking units, intermediate or cycling units, and base load units. If little energy is required, peaking units are cost-justified due to their lower capital cost as compared to large base load units. However, if much energy is needed, the lower energy cost (in cents/kWh) of capital-intensive base load units make them more desirable." Floyd Direct Testimony, pp. 3-4. As a result, the SCP method's reliance on one hour each year does not reflect the actual "real world" costs of generation throughout the year.

19. Industrials and the large commercial customers can shave their use of electricity or rely on renewable energy at peak time, and as a class, they can get lower



rates. As a case in point, the present request by Dominion to lower rates to its largest industrial customer in Docket E-22 Sub 479, because Dominion failed to notify it to reduce during peak, points out the significant lowering of a large customer's rates if it is given the opportunity to decrease its operations during peak periods.

20. In addition to the SCP and the SWPA, there are a number of other allocation methods which can be used to allocate costs:

- a. The monthly peak averaging methodology looks at peak demand for each of the twelve months and the related, five-coincident peak averaging, looks at the peak demand for the five months with the highest demand.
- b. The peak - midrange -baseload methodology is a fuller analysis of what each class or subclass requires to meet their demands throughout the year, and what generation is required to meet those needs, as well as the costs to construct and operate those units (including the depreciation of construction costs).
- c. Some methodologies use a combination of demand and energy components on a fixed ratio (such as 90-10 or 50-50).
- d. Some of the allocation methods rely heavily on a consideration of the marginal costs so that the more recent customers with the costs of the new plants that are required.
- e. Most of the allocation methods use some formula for weather adjustment.
- f. The negotiated rates methodology allows parties to a proceeding to negotiate on what rates seem fair and reasonable to each of the classes or subclasses.

g. There are other cost allocation methods that could be considered.

Each of these should be evaluated to determine if they provide fair and reasonable rates in light of the actual demand, and the actual generation requirements, needed by each class or subclass of customers.

21. Neither of the allocation methodologies utilized by the North Carolina utilities, the SCP and to a lesser extent, the SWPA, completely reflect the effects of the significant new growth from new industry, such as the data centers, who have much higher loads than most of the other customers in all classes. See Docket E-7 Sub 989, Cook Prefiled Testimony and his Exhibit, “How Dirty is Your Data? A Look at the Energy Sources That Power Cloud Computing.” The new data center industry will soon require the output from a dedicated 1000 MW baseload unit, 24 hours a day, 365 days a year. If a new unit is needed to meet this demand, data centers would only bear 7% of the allocated costs of the new unit, rather than 100% of the unit they will actually use.<sup>1</sup> This is categorically unfair to all of the other ratepayers. Reasonable rates and good planning require a full review of the need for baseload, intermediate and peak generating facilities throughout each day for the entire year.

22. In defining its rate making authority, case law states that the “Commission has no power to authorize rates that result in unreasonable and unjust discrimination.” *State ex rel. N.C. Utilities Commission v. N.C. Textile Mfrs. Ass’n, Inc.*, 313 N.C. 215, 328 S.E.2d 264 (1985). Factors in determining whether a proposed rate results in

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<sup>1</sup> Given that Duke Energy’s summer peak is approximately 16,000 MW, the increase to 17,000 MW to meet the new data center demand means that the data centers load during peak is only 7% of the total.

unreasonable discrimination include "quantity of use, time of use, manner of service, costs of rendering the two services, competitive conditions, consumption characteristics of several classes and value of service to each class." *N.C. Textile Mfrs, supra*. Rates must reflect the need for the utility service, and this requires an examination of proposed generating facilities and other major expenses the utility proposes to incur. The "present rate payers may not be required to pay excessive rates for service to provide a return on property which will not be needed in providing utility service within the reasonable future." *State ex rel. N.C. Utilities Commission v. General Tel. Co. of Southeast*, 281 N.C. 318, 189 S.E.2d 705 (1972).

#### CONCLUSION

23. NC WARN respectfully requests that the Commission open a rulemaking docket to investigate whether different rate allocation methods would yield rates that are more fair and reasonable than the SCP cost allocation methodology and at the same time abolish the SCP methodology. Secondly, the rulemaking would investigate whether additional information and analysis in the IRPs on new demand from new high load industries would better assist the Commission in aligning rates with planning.

Respectfully submitted, this the 1<sup>st</sup> day of May 2012.

  
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CERTIFICATE OF SERVICE

I hereby certify that the following PETITION BY NC WARN was filed with the parties in Docket E-100 Sub 128, Docket E-7 Sub 989 and Docket E-22 Sub 479 by deposit in the U.S. Mail, postage prepaid, or by email transmission.

This is the 1<sup>st</sup> day of May 2012.

  
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Attorney at Law

## EXHIBIT 1

### Amendments to Rule 1-17 (FILING OF INCREASED RATES, APPLICATION FOR AUTHORITY TO ADJUST RATES)

New subsection (l) added:

- (l) Procedure for Cost Allocations in Rate Adjustments by Electric Utilities
  - (1) Purpose. The purpose of this Section (l) of Rule R1-17 is to set forth the additional information and analysis which electric utilities are required to follow to for rate adjustments in Article 7 of Chapter 62 of the N.C. General Statutes. The intent of these rules is to require a demonstration by the applicant that the cost allocation methodologies it proposes to use in adjusting rates are fair and reasonable to all classes and subclasses of customers.
  - (2) Additional information and analysis required. As part of its application, the electric utility for rate adjustments, shall file with the Commission rates based the following cost allocation methodologies:
    - (a) Summer Winter Peaking Average;
    - (b) Peak - midrange -baseload;
    - (c) Twelve-month peaking average with and without energy components;
    - (d) Fixed ratio combinations of demand and energy components;
    - (e) Other cost allocation methodologies that the electric utility asserts should be considered by the Commission.
  - (3) Assumptions and calculations used in each methodology. For each cost allocation methodologies used above, the electric utility shall describe the assumptions used, including but not limited to, dates and times of peaks used, weather adjustments, marginal costs for new construction, ratios between demand and energy use, differences between classes and subclasses of customers, and modifications to any standard methodology. The application shall contain the calculations used by the electric utility in establishing its proposed rates using the differing methodologies.
  - (4) Comparison of cost allocation methodologies presented. As part of its application, the electric utility shall compile the results of the various cost allocation methodologies presented in its application so that the Commission is able to compare the results.

Exhibit 1, continued

- (5) Justification of the methodology proposed. As part of its application, the electric utility shall demonstrate that the cost allocation methodology it proposes results in fair and reasonable rates, and provides its rationale for rejecting other cost allocation methodologies.

## EXHIBIT 2

### Amendment to Rule R8-60 (INTEGRATED RESOURCE PLANNING AND FILINGS)

#### New subsection (i)(10):

(i)(10) Analysis of new customer demand. In addition to the demand forecasts required above, the report shall include an analysis characterizing the demand growth by differing types of customers, such as new industries or new processes used by existing industries; new customers or significant changes in residential, commercial or industrial demand for electricity; an analysis of new sales (both wholesale and retail); and the requirements for new generation to meet the new demand and new sales. This analysis should contain, but is not limited to requirements for peak, midrange and baseload generation; load characteristics; requirements for new or upgraded transmission lines; and proposed demand side management methods, if any, to meet the meet the new demand and energy requirements. For the purposed of this subsection, the analysis of “new demand” and “new sales” characterizes significant changes over the previous three years and for the subsequent ten years. The electric utility shall provide its assumptions and methodologies used in providing this analysis.